

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. through 3. (canceled)

4. (previously presented) A surgical instrument comprising:
- a surgical instrument for implanting an anastomotic ring device comprising a woven tube of wire having outer loops or ends which thermally deform and evert when inserted into walls of two adjacent lumens at a luminal interface of an anastomotic site, the ends of the tube everting to form petals in a manner which holds the luminal interface of the anastomotic site into apposition, comprising:
- an actuating member formed of a plurality of proximal leaves and a plurality of distal leaves which each leaf outwardly actuates by a cantilevered, hinged relationship to a central portion of the actuating member, configured to receive an anastomotic ring and moveable between a cylindrical, unactuated position and a hollow rivet forming shape in response to a compressive actuating force;
- a plurality of distal engaging surfaces, each formed on a respective distal leaf spaced away from the central portion and positioned to engage a selected outer loop of a distal portion of the unactuated, cylindrical anastomotic ring for pulling the engaged outer loop proximally and outwardly during actuation;
- a plurality of proximal engaging surfaces, each formed on a respective proximal leaf spaced away from the central portion and positioned to engage a selected outer loop a proximal portion of the unactuated, cylindrical anastomotic ring for pulling the engaged outer loop distally and outwardly during actuation;
- a handle including an actuation mechanism for producing the compressive actuating force; and
- an elongate cannula connecting the handle to the actuating member and operably configured to position the distal leaves on a distal side of an anastomotic opening and to position the proximal leaves on a proximal side of

the anastomotic opening, and configured to transfer the compressive actuating force from the handle to the actuating member wherein the handle is further operably configured to produce the compressive actuating force by producing a proximally directed longitudinal motion and a distally directed longitudinal motion, the elongate cannula operably configured to separately transfer the proximally and distally directed longitudinal motions respectively to distal and proximal portions of the actuating member to pivot corresponding distal and proximal leaves toward each other to actuate the anastomotic ring device from a cylinder shape to a hollow rivet shape, wherein the elongate cannula comprises a first tube connected to the proximal portion of the actuating member and a second tube slidably received in the tube and connected to the distal portion of the actuating members and a third tube interposed between the first and second tubes and distally engaged to a central portion of the actuating member.

5. through 7. (canceled)

8. (previously presented) A surgical instrument comprising:  
a surgical instrument for implanting an anastomotic ring device comprising a woven tube of wire having outer loops or ends which thermally deform and evert when inserted into walls of two adjacent lumens at a luminal interface of an anastomotic site, the ends of the tube everting to form petals in a manner which holds the luminal interface of the anastomotic site into apposition, comprising:

an actuating member formed of a plurality of proximal leaves and a plurality of distal leaves which each leaf outwardly actuate by a cantilevered, hinged relationship to a central portion of the actuating member, configured to receive an anastomotic ring and moveable between a cylindrical, unactuated position and a hollow rivet forming shape in response to a compressive actuating force;

a plurality of distal engaging surfaces, each formed on a respective distal leaf spaced away from the central portion and positioned to engage a selected outer loop of a distal portion of the unactuated, cylindrical

anastomotic ring for pulling the engaged outer loop proximally and outwardly during actuation;

a plurality of proximal engaging surfaces, each formed on a respective proximal leaf spaced away from the central portion and positioned to engage a selected outer loop a proximal portion of the unactuated, cylindrical anastomotic ring for pulling the engaged outer loop distally and outwardly during actuation;

a handle including an actuation mechanism for producing the compressive actuating force;

an elongate cannula connecting the handle to the actuating member and operably configured to position the distal leaves on a distal side of an anastomotic opening and to position the proximal leaves on a proximal side of the anastomotic opening, and configured to transfer the compressive actuating force from the handle to the actuating member wherein the handle is further operably configured to produce the compressive actuating force by producing a proximally directed longitudinal motion and a distally directed longitudinal motion, the elongate cannula operably configured to separately transfer the proximally and distally directed longitudinal motions respectively to distal and proximal portions of the actuating member to pivot corresponding distal and proximal leaves toward each other to actuate the anastomotic ring device from a cylinder shape to a hollow rivet shape; and

an electrical illumination source attached to a distal end of the cannula distal to the actuating member and directing illumination proximally toward the actuating member and comprising a control operably connected proximate to the distal portion of the actuating member.

9. (original) The surgical instrument of claim 8, wherein the actuating member comprises a light transmissive material.

10. (original) The surgical instrument of claim 8, wherein the actuating member comprises an electroluminescent material.

11. through 19. (canceled)

20. (previously presented) A surgical instrument, comprising:

a cannula;

an actuating member distally and laterally presented on the cannula for receiving a generally cylindrical anastomosis ring and formed of radially spaced proximal leaves and a plurality of distal leaves which each distal leaf outwardly actuates by a cantilevered, hinged relationship to a central portion of the actuating member;

a first control operative to compress a longitudinal end of the actuating member toward a center of the actuating member to actuate a respective portion of the received anastomosis ring;

a second control operative to compress another longitudinal end of the actuating member toward the center of the actuating member to actuate the other respective portion of the received anastomosis ring forming a hollow rivet shape;

wherein the first and second controls are independently actuable to allow independent actuation of either longitudinal end of the actuating member; and

wherein the longitudinal end of the actuating member controlled by the first control comprises a distal end positioned with a distal tissue lumen and wherein the longitudinal end of the actuating member controlled by the second control comprises a proximal end positioned within a proximal tissue lumen, the surgical instrument further comprising an illuminator connected to the cannula positioned to illuminate the distal longitudinal end of the actuating member to illuminate an apposition of the two tissue lumens.

21. through 22. (canceled)